

Title (en)

IMAGE PREDICTION FOR HDR IMAGING IN OPEN-LOOP CODECS

Title (de)

BILDVORHERSAGE FÜR HDR-BILDGEBUNG IN CODECS MIT OFFENER SCHLEIFE

Title (fr)

PRÉDICTION D'IMAGE POUR IMAGERIE HDR DANS DES CODECS EN BOUCLE OUVERTE

Publication

EP 4173297 A1 20230503 (EN)

Application

EP 21737317 A 20210621

Priority

- EP 20182014 A 20200624
- US 202063043198 P 20200624
- US 2021038258 W 20210621

Abstract (en)

[origin: WO2021262599A1] Given input HDR and SDR images representing the same scene, a prediction model to predict the HDR image from a compressed representation of the input SDR image is generated as follows: a) generate noise data based at least on the characteristics of the HDR image b) generate a noisy SDR image by adding the noise data to the SDR image c) generate an augmented HDR data set and an augmented SDR data set by using the input HDR and SDR images and the noisy SDR image d) generate a prediction model to predict the augmented HDR data set based on the augmented SDR data set and e) solve the prediction model according to a minimization-error criterion to generate a set of prediction parameters to be transmitted to a decoder together with a compressed representation of the input SDR image to reconstruct an approximation of the input HDR image.

IPC 8 full level

H04N 19/85 (2014.01); **G06T 5/00** (2006.01); **H04N 19/117** (2014.01); **H04N 19/136** (2014.01); **H04N 19/146** (2014.01); **H04N 19/172** (2014.01); **H04N 19/182** (2014.01); **H04N 19/186** (2014.01)

CPC (source: EP US)

H04N 19/117 (2014.11 - EP); **H04N 19/136** (2014.11 - EP); **H04N 19/146** (2014.11 - EP); **H04N 19/172** (2014.11 - EP); **H04N 19/182** (2014.11 - EP US); **H04N 19/186** (2014.11 - EP US); **H04N 19/597** (2014.11 - US); **H04N 19/85** (2014.11 - EP)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

WO 2021262599 A1 20211230; CN 116157824 A 20230523; EP 4173297 A1 20230503; JP 2023533681 A 20230804; JP 7541129 B2 20240827; US 2023254494 A1 20230810

DOCDB simple family (application)

US 2021038258 W 20210621; CN 202180060015 A 20210621; EP 21737317 A 20210621; JP 2022579948 A 20210621; US 202118012582 A 20210621